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ENVIRONMENTAL ASSESSMENT EA Number: OR125-02-21

BLM Coos Bay District Office Lease/Serial/Case file No.: N/A

Proposed Action Title/Type: Bear Creek Wetland Enhancement/Natural Channel Reconstruction and Fish Passage Culvert Replacement.

Location of Proposed Action: Bear Creek, Township 28 South, Range 14 West, Section 22, North ½

Applicant (if any): Coquille Watershed Association (Jennifer Hampel (541) 396-2229)

Conformance With Applicable Land Use Plan: This proposed action is subject to the *Coos Bay District Resource Management Plan & Environmental Impact Statement* and its Record of Decision (BLM, 1995); which is in conformance with the *Final Supplemental Environmental Impact Statement on Management of Habitat for Late Successional and Old Growth Forest Related Species Within the Range of the Northern Spotted Owl* and its Record of Decision (Interagency, 1994). This plan has been reviewed to determine if the proposed action conforms with the land use plan's terms and conditions as required by 43 CFR 1601.5.

Remarks: The Proposed Action is in compliance with the *Coos Bay District Resource Management Plan & Environmental Impact Statement* and its Record of Decision (BLM, 1995)(RMP); hereby incorporated by reference. The RMP has been determined to be consistent with the standards and guidelines for healthy lands at the land use plan scale and associated time lines.

Need for Proposed Action: Bear Creek is one of the few non-tidegated systems on the lower Coquille River. It has been designated as high priority by the Coquille Watershed Association projects committee for restoration activities. It has high numbers of spawning Coho and Chinook. Over-winter areas and summer rearing are limiting factors for the lower Coquille system. The Coquille Watershed Association in cooperation with Oregon Department of Fish and Wildlife has completed several instream habitat projects upstream to improve spawning and rearing habitat. The Coquille Watershed Association has completed more than 6 miles of riparian fencing and planting projects on Bear Creek. There are several more projects in the planning stages and an instream structure placement project will be completed summer of 2002.

Description of Proposed Action:
The proposed action is to create off-channel rearing habitat near the mouth of Bear Creek. Approximately 4000 cubic yards of material would be excavated to reroute the existing channel to the abandoned natural channel. The new rearing area would be fed by a spring (unnamed tributary to Bear Creek) which flows year-round. The site has had elevational surveys and the preliminary designs are complete. A culvert at the lower end of the small tributary will be replaced. This culvert will be designed to allow juvenile passage into the new rearing habitat and allow for high flows. The project is planned for summer 2003. Culvert replacement projects are covered in EA OR125-02-12 Coos Bay District Culvert and Stream Crossing Environmental Assessment.

Environmental Impacts to Critical Elements of the Human Environment:

Critical Elements	Affected Yes	Affected No	Critical Elements	Affected Yes	Affected No
Air Quality	__	X	T & E Species	__	X
ACECs	__	X	Wastes, Hazardous/Solid	__	X
Cultural Resources	__	X	Water Quality	__	X
Farmlands, Prime/Unique	__	X	Wetlands/Riparian Zones/ACS	__	X
Floodplains	__	X	Wild & Scenic Rivers	__	X
Unresolved conflicts	__	X	Wilderness	__	X
Noxious Weed Management	__	X	Port Orford Cedar Management	__	X
Environmental Justice Concerns	__	X	Energy production, transmission	__	X
Native American religious concerns and/or Indian trust resources	__	X			

Description of Impacts to Specific Elements of the Human Environment:

Geology

The general geology in the area is Quarternary Alluvium deposited on Roseburg Formation sedimentary rocks (sandstones and siltstones) (Baldwin, 1973). The soils are listed as Nehalem silt loam (directly adjacent to the existing channel) and Coquille silt loam (within the remainder of the flood plain).

The Nehalem is described as a deep, well drained soil. The main concern of operations on the soil is compaction. The plastic limit for the soil is 20 percent moisture. The Coquille soil is described as a deep, very poorly drained soil. Again, the main concern of operations on the soil is compaction. The plastic limit for the soil is 30 percent moisture.

Approximately 4,000 cubic yards of material will be excavated. It is assumed this will necessitate heavy equipment on the soil columns. Care must be taken to conduct operations in the driest season, reducing the passes of the equipment over any given portion of the land. Formation of "ruts" should be avoided. Operations on the soils should be limited to the plastic limit or drier.

The project narration describes numerous uses for the removed soil, including construction of year-round paths, disposal off-site, and maintaining existing elevations. Any exposed soils should be mulched and seeded to reduce erosion.

Care is needed in construction of the year-round paths. Such paths, if elevated, can in themselves, act as dikes, removing the adjacent areas from small flooding events. The paths surfaces should be covered to prevent erosion of the soil base from flooding actions and rain events.

Any disposal off-site should be reviewed to ensure placement is not contributing to an illegal fill of a jurisdictional wetland. Likewise, any fill placed adjacent to waterways and not in a wetland should be mulched and seeded, or covered in another manner, to reduce the risk of erosion.

The use of the soil to maintain existing elevations is confusing. If material is being lost due to stream action or other functions of erosion, then placement of additional material will simply be a source of sediment. If the erosion is not a "natural process" and needs to be controlled, additional design work will need to be completed before adding of material. Any exposed materials placed in this process should be seeded and mulched to reduce the risk of erosion. Likewise, material "placed at the base of the road" will also require erosion management.

The project narrative does not describe the process that will be used to reroute the flow from the existing channel to the newly constructed channels or what will be used to block the existing channel and prevent channel capture. Plug designs need to be completed. Previous experience has shown that soils can be used for plugging if sufficient quantities are used and piping of sediment is prevented. Hard surface plugs, such as tree roots, could be used if designed properly (piping is also a concern).

The project description discusses the "pulling back" of over-steepened slopes of the channel. It should be noted that tidal channels, as opposed to fluvial systems, are generally deep and narrow, forming a "box" channel profile, controlled by confining vegetation. Technical publications that could supplement the research and design include "Design Guidelines for Tidal Channels in Coastal Wetlands" by Philip Williams & Associates, Ltd., 1995.

Energy Review

This project does not alter the existing developments and opportunities or conditions. It is not identified within any known petroleum structures or plays. There is no identified wind, solar, biomass, nuclear, or hydroelectric potentials within the project boundaries. It appears not to have any direct or indirect adverse energy impacts. Therefore, a Statement of Adverse Energy Impact would not be required.

Hydrology

The beneficial effects from this project include wetland expansion, stream channel flood plain connectivity, and restoring the previous stream channel.

Fisheries

Bear Creek is a small tributary near the mouth of the Coquille River. This project area is tidally influenced. It has been identified by the Coquille Watershed Association as a high priority for restoration project success. The "Coos Wetlands Advisory Committee" has also chosen this watershed for restoration projects.

The following fish species are known or suspected to occur within Bear Creek: chinook salmon, coho salmon, steelhead trout, sea-run and resident cutthroat trout, redsided shiner, pacific and western brook lamprey, and various dace and sculpin species.

The Lower Coquille River 5th Field watershed is located within the Oregon Coast (OC) Evolutionary Unit (ESU), which extends south of the Columbia River to Cape Blanco. The following summarizes the Endangered Species Act (ESA) status of

salmonids within the ESU:

OC coho salmon were listed as "threatened" on August 10, 1988, and the Critical Habitat was designated February 16, 2000. However, in September 2001, the US District Court for the District of Oregon (Judge Hogan) determined that the listing was unlawful and it was set aside as being arbitrary and capricious (*Asea Valley Alliance v. Evans*). Hogan wrote that the listing by the National Marine Fisheries Service (NMFS) arbitrarily excluded hatchery spawned coho.

In review of Judge Hogan's ruling, the Ninth Circuit Court of Appeals issued a stay on December 14, 2001. This decision will remain in place until the Court makes a final ruling, which could be months or years. At the time of the writing of this EA, the listing of coho salmon as "threatened" has been reinstated.

In response to the *Alsea Valley Alliance v. Evans* September ruling, on February 11, 2002, the NMFS decided to review 24 ESUs currently listed as endangered or threatened. This review includes the OC coho salmon ESU. The current listing status for these species will remain in effect until the review is concluded.

Steelhead trout were listed as "candidate" species on March 19, 1988. Critical habitat is not designated for candidate species.

On April 5, 1999 the Oregon Coast coastal cutthroat trout ESU was designated as a candidate for listing. This species is under the jurisdiction of the U.S. Fish and Wildlife Service.

On February 16, 2000, NMFS designated critical habitat for 19 ESUs of salmon an steelhead trout populations; this included Oregon Coast coho salmon. The *New Mexico Cattle Growers Association v. U.S. Fish and Wildlife Service*, the 10th Circuit Court of Appeals held that the analysis of economic impacts for critical habitat designations must be more specific. This verdict and other pending lawsuits filed directly against NMFS, led NMFS to ask for a consent decree withdrawing the critical habitat designations for these 19 ESUs. On April 30, 2002, U.S. District Court for the District of Columbia approved this decree. At this time, NMFS is currently re-analyzing the economic impacts of designating critical habitat and will re-issue the designations when this analysis is complete.

There are no direct effects anticipated from this project. The channels that will be excavated do not currently support salmonid fish species during the time of year of excavation. These areas only have fish present during high water in the winter.

This project will benefit salmonid fish species upon completion. By re-connecting these channels within the floodplain, fish displaced to these areas in times of flooding will be able to return to the main channel of Bear Creek. Juvenile fish will also have more perennial off-channel habitat in which to rear during the summer months.

Aquatic habitat restoration projects are covered under the August 8, 2001 Programmatic Biological Opinion, issued by the National Marine Fisheries Service. No further consultation is required.

Botany

The Bandon area contains habitat for the endangered western lily (*Lilium occidentale*) plant species. It is listed on both the federal and state list as endangered. It is also a Bureau of Land Management Sensitive species. Even though western lily occurs in nearby areas of the proposed project area, the proposed project area does not support the habitat necessary for this species. The project area is outside the coastal terrace series which contains the cemented hardpan (black lock series) favorable for wetland development and thus potential habitat for the western lily (Imper, 2002). No special status plants or habitats suspected or known to occur in the Coos Bay District occur in the proposed project area. Pre-disturbance surveys for survey and manage are not required on private land.

Although no survey was conducted, the site was visited on September 5, 2002. No western lily plants were detected since it was past the flowering stage and remaining leaves could have died back or been destroyed through grazing. Surveys for the species should occur from mid-June to the end of July to ensure presence or absence. Also, the site visited did not appear to support the vegetation that is typical of western lily habitat structure.

This project should have no effect on special status plant species.

Cultural Resources

Class I inventory (review of project documentation and records check) shows no known cultural resources in the immediate vicinity of the abandoned natural channel. However, there was and archeological site (35CS15) recorded in 1951 at the intersection of Bear Creek and the Coquille River. Since this was after the rerouting of Bear Creek from the natural channel, it appears that 35CS15 was located at the intersection of the Coquille River with the manmade, not the natural channel.

Description of Mitigation Measures:

Geology

Based on the preceding observations and interpretations, the following recommendations are submitted:

- Limit Vehicle entry to the driest time of the year, adhering to the soil moisture limits to avoid compaction.
- Reduce track passes over the surface.
- Exposed soils should be heavily mulched and seeded with native vegetation stock.
- Ensure constructed pathways do not act as flood dikes.
- Design of erosion controls for existing elevations.
- Development of a plug design.
- Reference to supplemental technical publications and aids.

Hydrology

- Implementation of the Northwest Forest Plan Standards and Guidelines and the Aquatic Conservation Strategy, the Coos

Bay District Resource Management Plan including applicable soil and water conservation practices that constitute Best Management Practices (BMP's) as listed in Appendix D, and BMP's given in the EA should result in little measurable effects on the water resource from the proposed action.

Cultural Resources

- Since the known cultural resource (35CS15) was located adjacent to the manmade channel, the current project should not affect any remaining deposits. However, if potential cultural resources are encountered during this project, all work in the vicinity should stop and the District Archeologist must be notified at once (Stephan Samuels, Coos Bay District Archeologist, (541) 756-0100).

Persons/Agencies Consulted:
Coquille Watershed Association

Preparer(s):

Name	Title
Tim Barnes	Soil Scientist/Geologist/Adverse Energy Impacts
Dan Carpenter	Hydrologist
Madeleine Vander Heyden	Wildlife Biologist
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Steve Samuels	Archaeologist
Jenny Sperling	Botanist
Scott Knowles	Port-Orford-cedar/Noxious Weed/Environmental Justice Coordinator
Tim Votaw	Hazardous Materials Specialist
Terri Colby	Natural Resource Specialist

Date:
August 27, 2002

FINDING OF NO SIGNIFICANT IMPACT/DECISION RECORD:

I have reviewed this environmental assessment including the explanation and resolution of any potentially significant environmental impacts. I have determined that the proposed action with the mitigation measures described below will not have any significant impacts on the human environment and that an EIS is not required.. I have determined that the proposed project is in conformance with the approved land use plan. It is my decision to implement the project as described in the Description of the Proposed Action section with the mitigation measures described.

Decision Recommended by: NRSA:_____ Date:_____

NRSA:_____ Date:_____

NRSA:_____ Date:_____

Decision Approved by: Area Manager:_____ Date:_____